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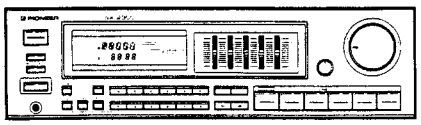
The future of sound and vision.

Service Manual



ORDER NO.
ARP1477

STEREO RECEIVER

SX-2300
SX-1300

MODEL SX-2300 and SX-1300 HAVE FIVE VERSIONS:

Type	Applicable model		Power requirement	Destination
	SX-2300	SX-1300		
KUC	○	○	AC120V only	U.S.A. and Canada
SD	○	○	AC110V, 120V−127V, 220V, 240V (switchable)	Kingdom of SaudiArabia and general market
HE	○	○	AC220V, 240V (switchable)	European continent
HB	○	○	AC220V, 240V (switchable)	United Kingdom
HEZ	○	○	AC220V, 240V (switchable)	West Germany

- **This manual is applicable to the SX-2300/KUC, SD, SX-1300/KUC and SD types.**
- **For the SX-2300/SD, SX-1300/KUC and SD types, refer to pages 30−31**
- **For the other types, refer to additional service manuals.**
- **Ce manuel pour le service comprend les explications en français de réglage. (p27)**
- **Este manual de servicio trate del método ajuste escrito en español. (P28)**

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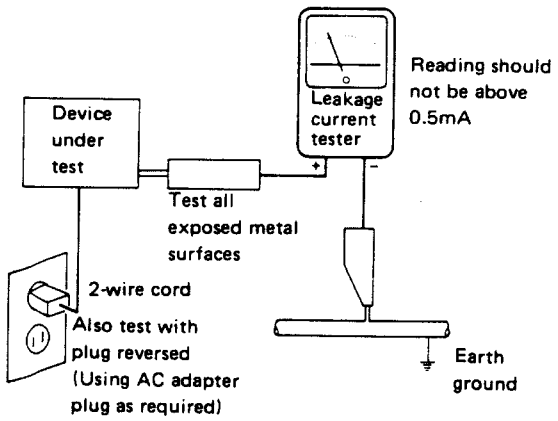
1. SAFETY INFORMATION

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
Device under test
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

ADVARSEL!

Lithiumbatteri. Eksplosionsfare. Udskiftning må kun foretages af en sagkyndig, og som beskrevet i servicemanualen.

Denne advarsel or angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anveisning. Batterierne må kun udskiftes med batterier af samme type og mærke.

WARNING!

Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below. The batteries must be replaced only by batteries of the same type and manufacture.

VAROITUS!

Litiumparistot. Räjähdysvaara. Vaihdon saa suorittaa ainoastaan asiantunteva huoltoteknikko noudattamalla huolto-ohjeessa annettuja ohjeita.

Tämä varoitus sijaitsee laitteessa tai käyttöohjeessa. Noudata litiumparistoja vaihtaessasi alla olevaa huomautusta. Paristot on vaihdettava samantyyppisiin ja saman tehtaan valmistamiin paristoihin.

2. SPECIFICATIONS

[SX-2300]

Amplifier Section

Continuous Average Power Output is 60 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.07% total harmonic distortion.

Continuous Power Output (both channel driven)*
20 Hz - 20 kHz, T.H.D. 0.07%, 8 Ω ..... 60 W + 60 W
Dynamic power output (with EIA test signal)
2/4/8 ohms ..... 145 W/125 W/85 W
Total Harmonic Distortion*
1 kHz, 60 W, 8 Ω 0.01%
Input (Sensitivity/Impedance)
PHONO ..... 2.5 mV/47 kΩ
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 150 mV/22 kΩ
Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)
PHONO ..... 130 mV
Output Level
TAPE REC ..... 150 mV
Frequency Response
PHONO (RIAA Equalization) ..... 30 Hz to 20,000 Hz ±0.5 dB
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 10 Hz to 70,000 Hz $^{+0.5}_{-3.0}$ dB
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO ..... 72 dB/75 dB
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 97 dB/80 dB
Graphic Equalizer frequency band
..... 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
MONO ..... 15.3 dBf (1.6 μV/75 Ω)
STEREO ..... 37.1 dBf (19.5 μV/75 Ω)
Signal-to-Noise Ratio
MONO ..... 78 dB (at 85 dBf)
STEREO ..... 75 dB (at 85 dBf)
Distortion
STEREO ..... 0.3% (1 kHz)
Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (±1 dB)
Antenna Input ..... 300 Ω balanced, 75 Ω unbalanced

AM Tuner Section

Frequency range, when 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 20 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... AM Loop Antenna

Miscellaneous

Power Requirements
U.S., Canadian model ..... AC 120 Volts, 60 Hz
Other destination models
..... ~AC 110 V, 120 V – 127 V, 220 V, 240 V (switchable), 50/60 Hz
Power Consumption
U.S., Canadian models ..... 315 W (UL), 415 VA (CSA)
Other destination models ..... 495 W
Dimensions ..... 420 (W) × 120 (H) × 337 (D) mm
16-9/16 (W) × 4-3/4 (H) × 13-9/32 (D) in
Weight (without package) ..... 7.0 kg (15 lb 7 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1

**Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

[SX-1300]

Amplifier Section

Continuous Average Power Output is 40 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.07% total harmonic distortion.

Continuous Power Output (both channel driven)*
20 Hz - 20 kHz, T.H.D. 0.07%, 8 Ω ..... 40 W + 40 W
Dynamic power output (with EIA test signal)
4/8 ohms ..... 80 W/65 W
Total Harmonic Distortion*
1 kHz, 40 W, 8 Ω 0.01%
Input (Sensitivity/Impedance)
PHONO ..... 2.5 mV/47 kΩ
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 150 mV/22 kΩ
Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)
PHONO ..... 130 mV
Output Level
TAPE REC ..... 150 mV
Frequency Response
PHONO (RIAA Equalization) ..... 30 Hz to 20,000 Hz ±0.5 dB
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 10 Hz to 70,000 Hz $^{+0.5}_{-3.0}$ dB
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO ..... 72 dB/75 dB
CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 97 dB/80 dB
Graphic Equalizer frequency band
..... 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
MONO ..... 15.3 dBf (1.6 μV/75 Ω)
STEREO ..... 37.1 dBf (19.5 μV/75 Ω)
Signal-to-Noise Ratio
MONO ..... 78 dB (at 85 dBf)
STEREO ..... 75 dB (at 85 dBf)
Distortion
STEREO ..... 0.3% (1 kHz)
Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (±1 dB)
Antenna Input ..... 300 Ω balanced, 75 Ω unbalanced

AM Tuner Section

Frequency range, when 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 20 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... AM Loop Antenna

Miscellaneous

Power Requirements
U.S., Canadian model ..... AC 120 Volts, 60 Hz
Other destination models
..... ~AC 110 V, 120 V – 127 V, 220 V, 240 V (switchable), 50/60 Hz
Power Consumption
U.S., Canadian models ..... 175 W (UL), 235 VA (CSA)
Other destination models ..... 280 W
Dimensions ..... 420 (W) × 120 (H) × 337 (D) mm
16-9/16 (W) × 4-3/4 (H) × 13-9/32 (D) in
Weight (without package) ..... 6.2 kg (13 lb 11 oz)

Furnished Parts

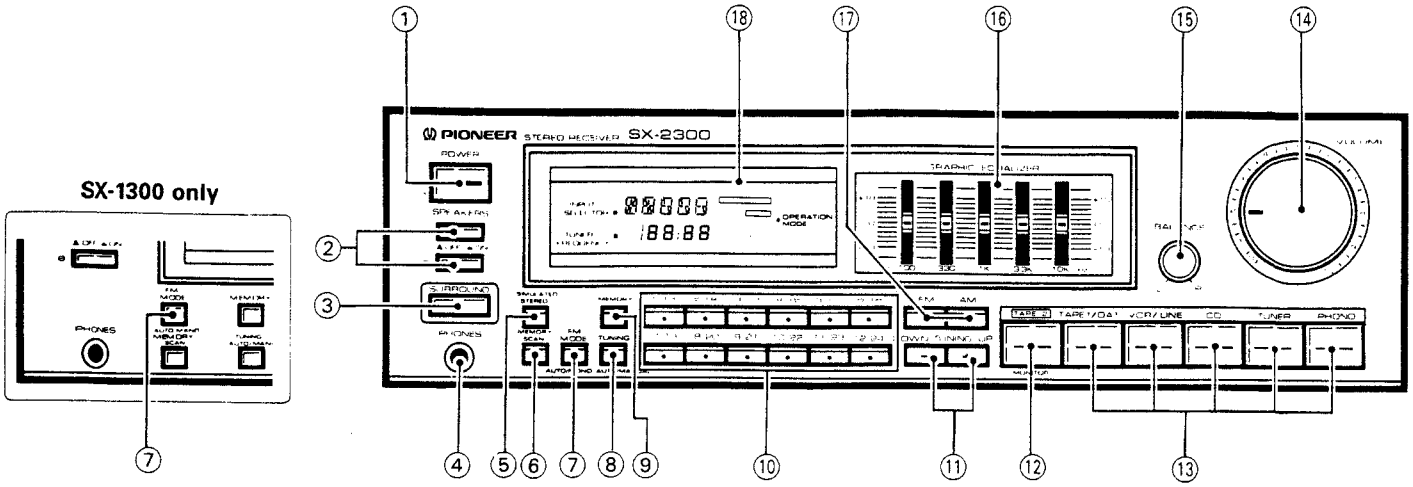
FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1

**Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

3. PANEL FACILITIES

The illustration shows model SX-2300.



① POWER switch

When this switch is pressed, power is supplied to the unit. Press the switch again to turn power off.

② SPEAKERS switches (■OFF, ■ON)

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to A terminals are in use.

B: When the speakers connected to B terminals are in use.

- Turn both A and B speakers to OFF position when only the HEADPHONES are inuse.

NOTE: (SX-1300 only)

No sound will be heard through the speakers when both A and B switches are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

③ SURROUND selector switch (SX-2300 only)

By pressing the A and B SPEAKERS switches, then pressing this switch ON, you can obtain surround reproduction. If you press this switch OFF again, normal reproduction from both speakers A and B will be obtained.

④ PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

⑤ SIMULATED STEREO switch (SX-2300 only)

This turns monaural signals into simulated stereo sound. Use this when you wish to experience the sense of stereo presence with AM broadcasts, VCR or other monaural signal sources.

NOTE:

This function can also be used with stereo sources, but it will result in a different sound from the normal stereo sound.

⑥ MEMORY SCAN switch

Press this switch to scan the stations in the memory.

⑦ FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lighted.

Auto stereo mode:

Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This switch has no effect on reception of AM broadcasts.

⑧ TUNING AUTO/MANUAL switch

Works during FM reception.

Use this switch to select either the AUTO mode or the MANUAL mode.

When the "AUTO" indicator is lit, the receiver is in the AUTO mode.

⑨ MEMORY switch

This is used to memorize stations. When the switch is pressed, the frequency indicator will flash. To memorize the frequency of any station, press the STATION CALLS switch while the frequency indicator is flashing.

⑩ STATION CALL switches

These switches are used to preset and recall desired broadcasting stations.

⑪ TUNING switches (DOWN, UP)
UP: The FM or AM band is scanned in the direction of increasing frequency.
DOWN: The opposite operation to that of the UP switch takes place.

⑫ Tape monitor switch
[TAPE 2] — Press when listening to tape playback with a tapedeck.

⑬ FUNCTION switches
Use to select playback source.
[TAPE 1/DAT] — Press when listening to tape playback with a cassette tape deck or digital audio tape deck.
[VCR/LINE] — Press when listening to programs from a component connected to the VCR/LINE terminals.
[CD] — Press when listening to compact disc playback with a CD player.
[TUNER] — Press when listening to AM or FM broadcasts with a tuner.
[PHONO] — Press when listening to record playback on a turntable.

⑭ VOLUME control
Use to adjust volume level.

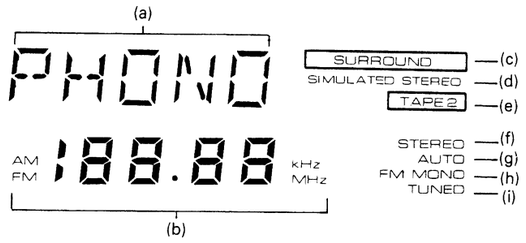
⑮ BALANCE control
Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the LEFT position and if the left side is louder, turn toward the RIGHT position.

⑯ GRAPHIC EQUALIZER controls
The equalizer is divided into five frequency ranges (100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz) to tailor music to the individual taste of the listener.

⑰ Band Selector switches
These switches are used to select either AM or FM reception.
AM: Push this switch for AM reception.
FM: Push this switch for FM reception.

⑱ OPERATION DISPLAY panel

(a) Indicates the function selected by the function switches.
(b) Indicates frequency or channel (STATION CALL number).
(c) SURROUND indicator
(d) SIMULATED STEREO indicator
(e) TAPE monitor indicates
(f) FM STEREO indicator
(g) AUTO tuning indicator
(h) FM MONO indicator
(i) TUNED indicator



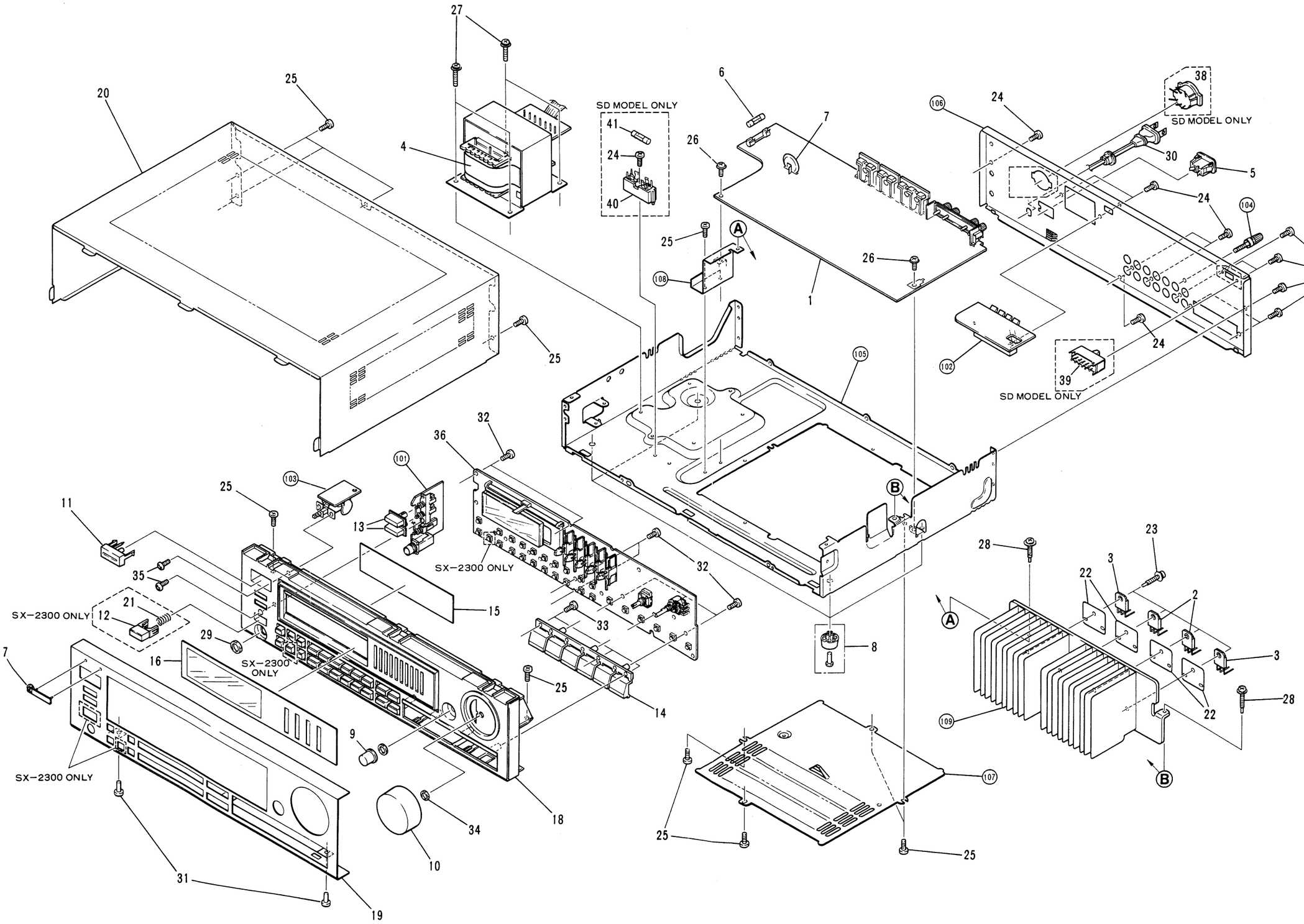
4. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

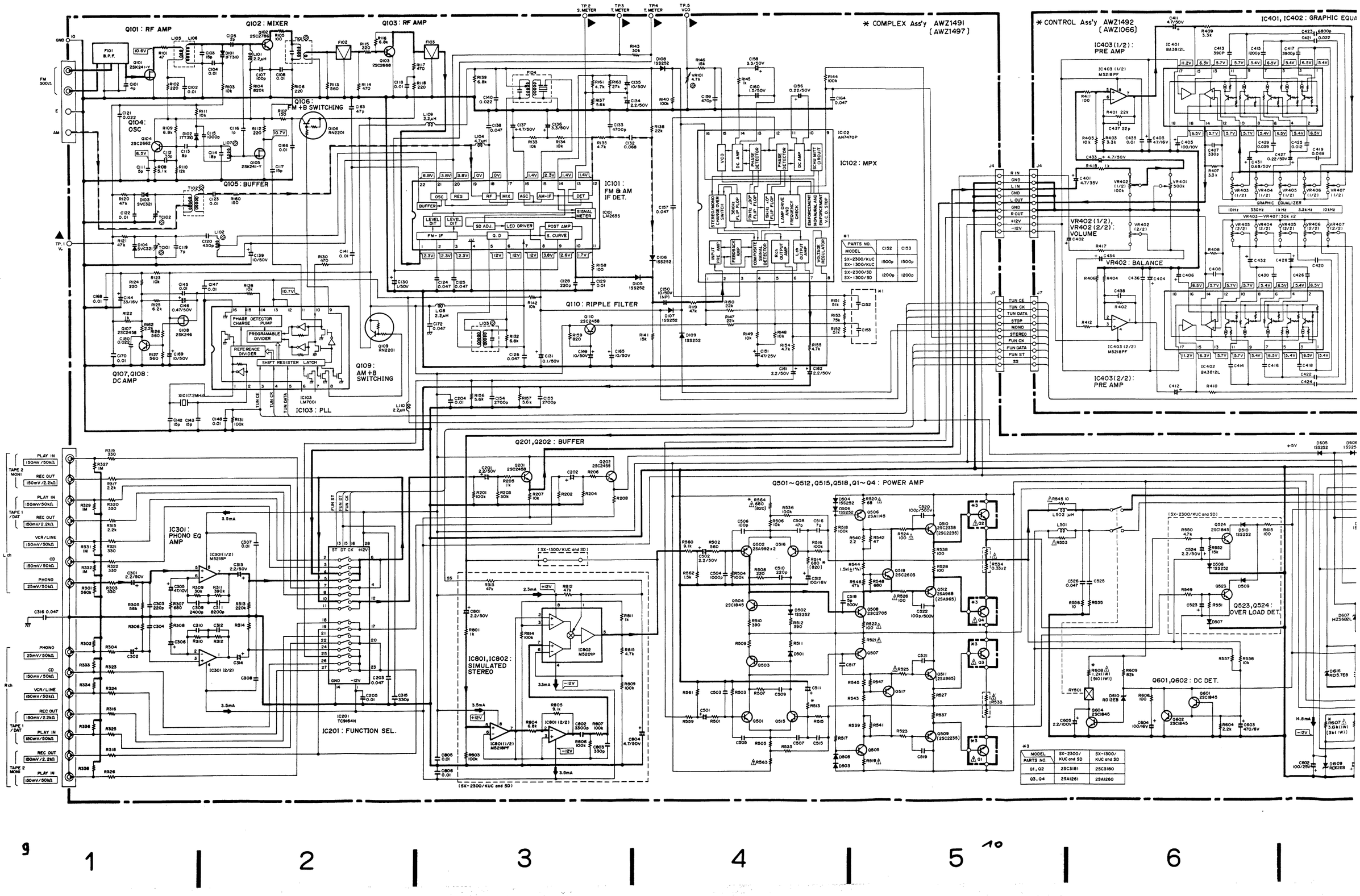
Parts List

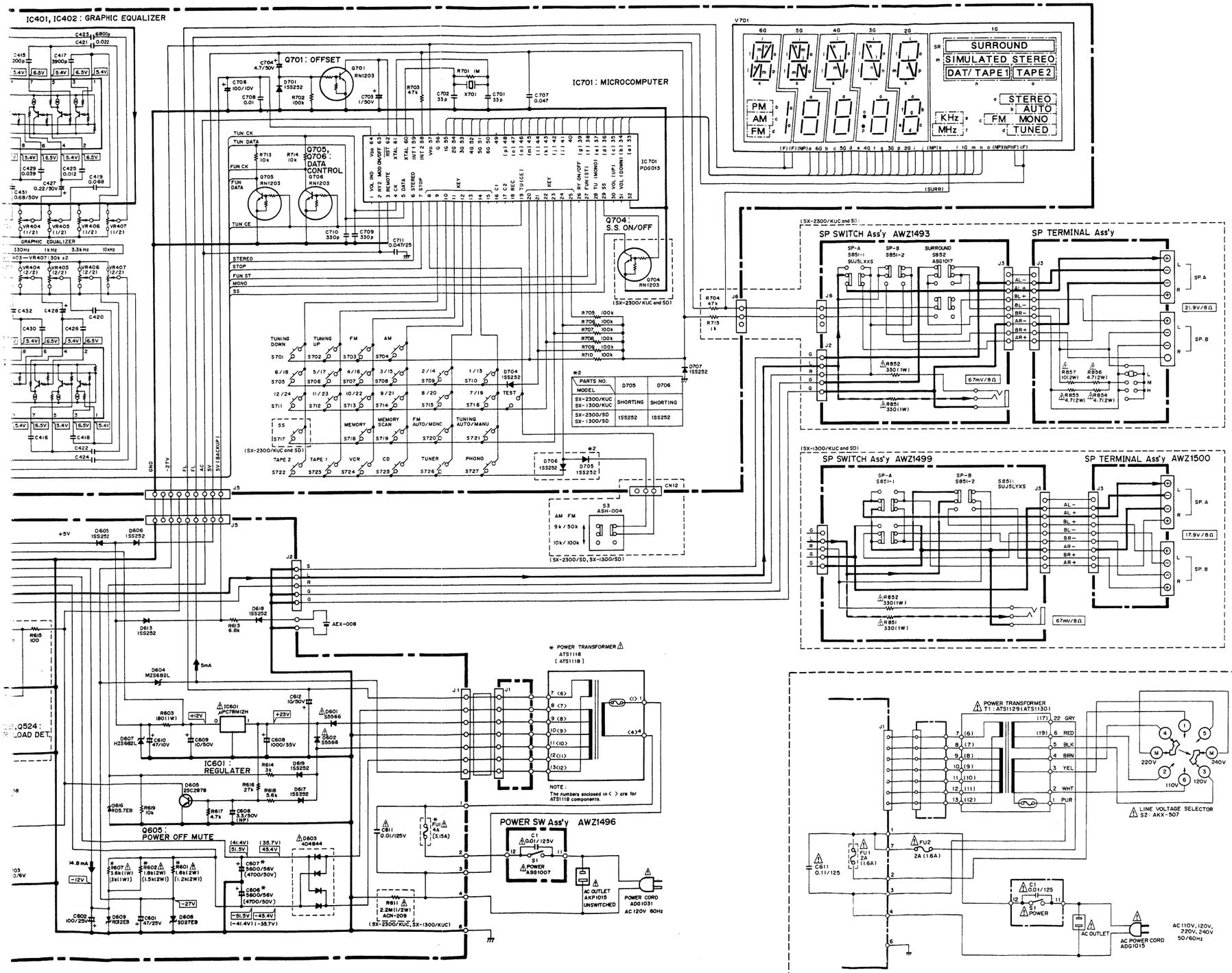
Mark	No.	Parts No.	Description
	1	AWZ1491	Complex assembly
⚠★★	2	2SA1264N	Q3,Q4
⚠★★	3	2SC3181N	Q1,Q2
⚠	4	ATS1116	Power Transformer T1
⚠	5	AKP1015	AC Socket 1P
⚠★★	6	AEK−100	Fuse (FU1 4A)
⚠	7	AEX−008	Lithium battery
	8	AEC−784	Leg assembly
	9	AAB1010	Rotary Knob (BALANCE)
	10	AAB1058	Rotary Knob (VOLUME)
	11	AAD1152	Knob(POWER)
	12	AAD1162	Knob(SURROUND)
	13	AAD1295	Knob (SPEAKERS)
	14	AAD1296	Knob Array (TAPE2, TAPE1/DAT,VCR/LINE,CD,TUNER,PHONO)
	15	AAK1400	FL Filter
	16	AAK1401	Sheet Panel
	17	AAM−030	Friction Plate
	18	AMB1283	Panel base
	19	ANB1166	Front Panel
	20	AZN1466	Bonnet case
	21	ABH1034	Coil spring
	22	AEP−313	Mica sheet
	23	ABA−297	Screw
	24	ABA−298	Screw(3×8)
	25	ABA1009	Screw(3×6)
	26	ABA1011	Screw(3×6)
	27	ABA1021	Screw(3×10)
	28	ABA1052	Screw(3×12)
	29	ABN−065	Nut
⚠	30	ADG1031	AC Power cord
	31	BBT30P080FZK	Screw
	32	BBZ26P080FMC	Screw
	33	BPZ30P080FZK	Screw
	34	NK70FUC	Nut
	35	VMZ30P060FMC	Screw

Mark	No.	Parts No.	Description
	36	AWZ1492	Control assembly
	37	VMZ26P040FZK	Screw
⚠	38	AKX−507	S2 Voltage selector switch
	39	ASH−004	S3 Slide switch
	40	AKR−038	Fuse Holder
	41	AEK−122	Fuse (FU2 2A)
	101		SP switch assembly
	102		SP Terminal assembly
	103		Power SW assembly
	104		Terminal (GND)
	105		Chassis
	106		Rear Panel
	107		Bottom Plate
	108		Heat sink Holder
	109		Heat sink


SD MODEL ONLY
SX-2300 ONLY
SX-2300 ONLY
SX-2300 ONLY
SD MODEL ONLY
SD MODEL ONLY

5. SCHEMATIC DIAGRAM


Q101 : RF AMP
Q102 : MIXER
Q103 : RF AMP
* COMPLEX Ass'y AWZ1491 (AWZ1497)
Q106 : FM +B SWITCHING
Q104 : OSC
Q105 : BUFFER
IC101 : FM & AM IF DET.
IC102 : MPX
Q110 : RIPPLE FILTER
Q107, Q108 : DC AMP
Q109 : AM+B SWITCHING
IC103 : PLL
* CONTROL Ass'y AWZ1492 (AWZ1066)
IC401, IC402 : GRAPHIC EQUA
IC403(1/2) : PRE AMP
VR402 (1/2), VR402 (2/2) : VOLUME
VR402 : BALANCE
IC403(2/2) : PRE AMP
Q201,Q202 : BUFFER
IC301 : PHONO EQ AMP
IC201 : FUNCTION SEL.
IC801,IC802 : SIMULATED STEREO
Q501~Q512,Q515,Q518,Q1~Q4 : POWER AMP
Q523,Q524 : OVER LOAD DET.
Q601,Q602 : DC DET.



PARTS NO. MODEL	D705	D706
SX-2300/KUC SX-1300/KUC	SHORTING	SHORTING
SX-2300/SD SX-1300/SD	1SS252	1SS252

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
: DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES

S701 : TUNING DOWN
S702 : TUNING UP
S703 FM
S704 : AM
S705 : 6/18
S706 : 5/17
S707 : 4/16
S708 : 3/15
S709 : 2/14
S710 : 1/13
S711 : 12/24
S712 : 11/23
S713 : 10/22
S714 : 9/21
S715 : 8/20
S716 : 7/19
S717 : SS (SD MODEL ONLY)
S718 : MEMORY
S719 : MEMORY SCAN
S720 : FM AUTO/ MONO
S721 : TUNING AUTO/ MANU
S722 : TAPE 2
S723 : TAPE 1
S724 : VCR
S725 : CD
S726 : TUNER
S727 : PHONO

S1 : POWER
S851-1 : SP-A ON-OFF
S851-2 : SP-B ON-OFF
S852 : SURROUND ON-OFF (SX-2300 ONLY)
S854 : SURROUND LEVEL L/M/H
S3 : (SD MODEL ONLY)

Note : This general circuit diagram is based on SX-2300/KUC.

- Components marked with * for SX-2300 differ from those for SX-1300. Figures enclosed in [ ] are for SX-1300.
- Figures enclosed in ▭ indicate DC voltage values when SX-1300 has received no signal.
- Figures enclosed in ( ) indicate DC voltage values when SX-1300 yields rated output.
- Circuits enclosed in [ ] are necessary for the specified models.
- Assembly Nos. in red are for SX-1300.

6. P.C. BOARDS CONNECTION DIAGRAM

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 (E)	or	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

SX-1300 / KUC and SD

SX-2300/KUC and SD

SP switch assembly

SX-2300/KUC and SD

SP terminal assembly

Power SW assembly

Control assembly (AWZ1492)

Q708
Q701

IC701

X701

IC402

IC401

Q704

Q706

Q705

7 8 9 10 11

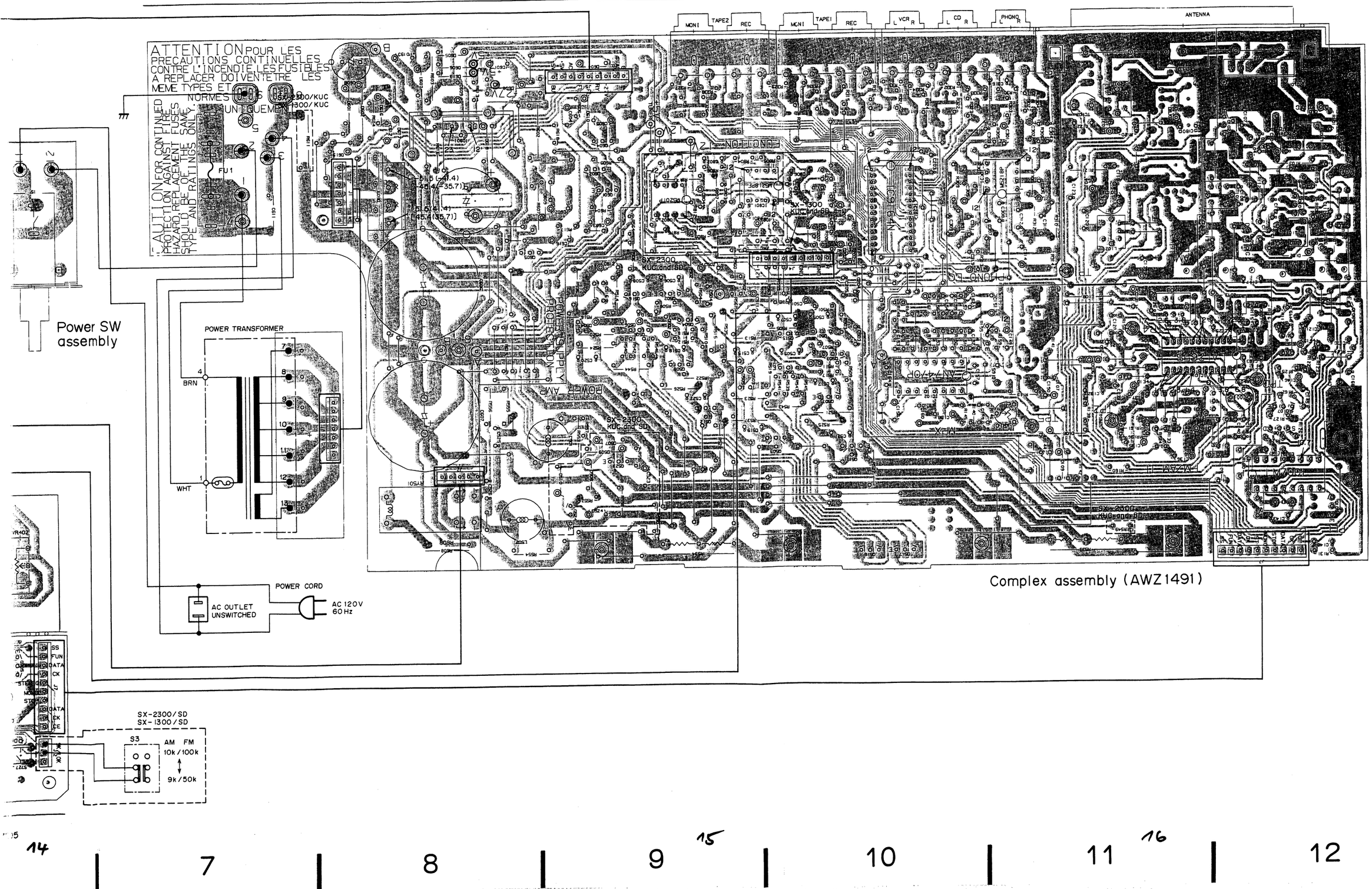
IC601 Q601 Q602 Q604 Q605 Q516 IC802 Q502 Q506 Q510 Q504 Q508 Q512 Q523 Q524 Q201 IC801 Q202 IC201 Q515 Q501 Q505 Q503 Q507 Q509 Q511 Q517 Q518 IC301 IC102 Q110 Q102 Q101 Q105 Q104 IC101 Q107 Q106 Q108 IC103 Q109

A

B

C

D



14 7 8 9 15 10 11 16 12

7 | 8 | 9 | 10 | 11

A

B

C

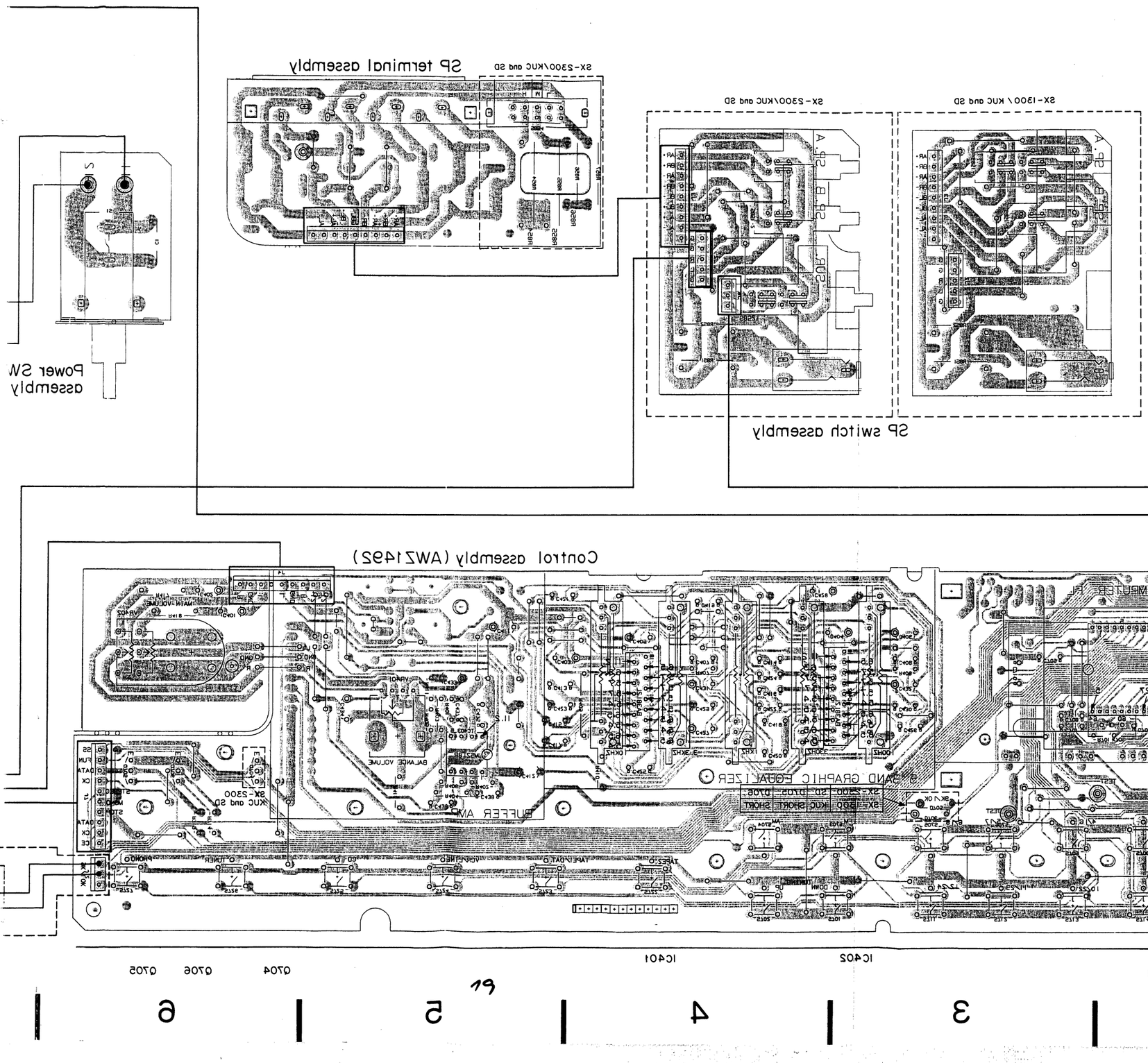
D

Complex assembly (AWZ1491)

Power SW assembly

12 | 11 | 10 | 9 | 8 | 7

NOTE:
This picture shows the foil side of the printed circuit.



A

B

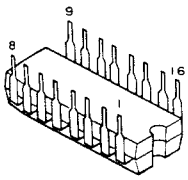
C

D

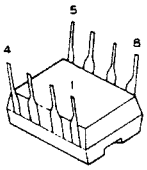
1 2 3 4 5 6

External Appearance of Transistors and ICs

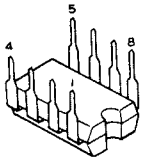
AN7470P



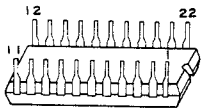
M5201P



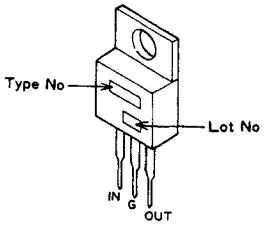
M5218P
M5218PF



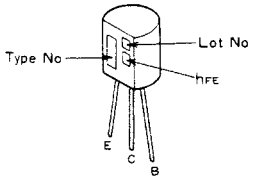
TC9164N



μPC78M12H



2SA1145
2SC2705
2SC2878



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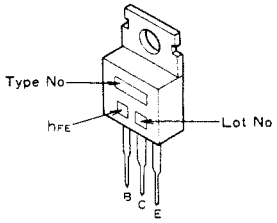

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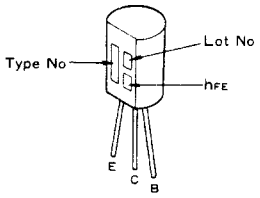
2SC1845



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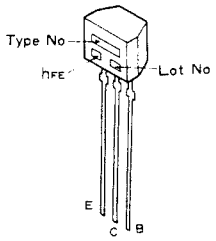

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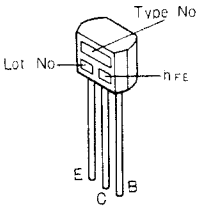

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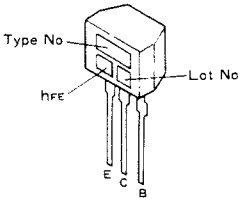

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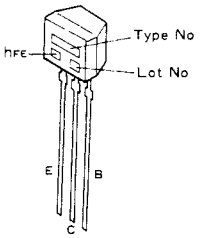
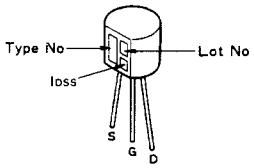
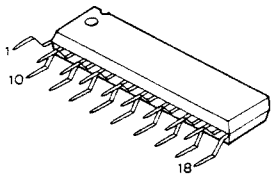


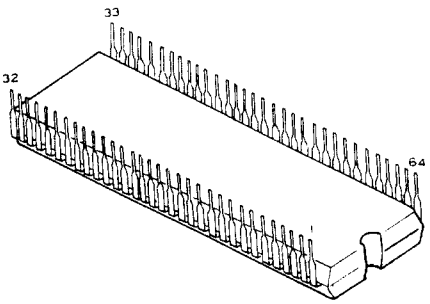
2SK246



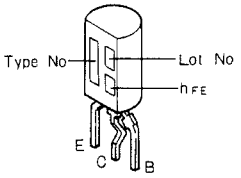
BA3812L



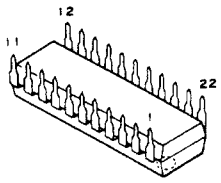
PDG013



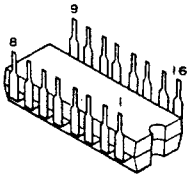
2SC2235
2SA965



LA1265S



LM7001



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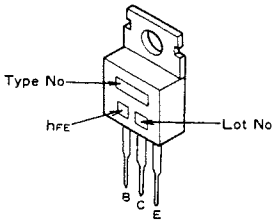
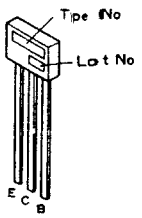


RN1203



7. ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Miscellaneous Parts

P.C.BOARD Assemblies

Mark	Symbol & Description	Part No.
	Complex assembly	AWZ1491
	Control assembly	AWZ1492
	SP Switch assembly	
	SP Terminal assembly	
	Power SW assembly	

OTHERS

Mark	Symbol & Description	Part No.
⚠★★	Q3,Q4	2SA1264N
⚠★★	Q1,Q2	2SC3181N
⚠ ★	T1 Power Transformer (AC120V)	ATS1116
⚠	AC Socket (1P)	AKP1015
⚠★★	FU1 Fuse (4A/125V)	AEK−100
⚠	Lithium battery	AEX−008
⚠	AC Power cord	ADG1031

Complex assembly (AWZ1491)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC102 MPX IC	AN7470P
★★	IC101 AM/FM IC	LA1265S
★★	IC103 PLL IC	LM7001
★★	IC802 OP−AMP IC	M5201P
★★	IC301 OP−AMP IC	M5218P
★★	IC801 OP−AMP IC	M5218PF
★★	IC201 E−SW IC	TC9164N
★★	IC601	μPC78M12H
★★	Q106,Q109Q	RN2201
★★	Q505,Q506	2SA1145
★★	Q511,Q512	2SA968
★★	Q501,Q502,Q515,Q516	2SA992
★★	Q503,Q504,Q523,Q524,Q601, Q602,Q604	2SC1845
★★	Q509,Q510	2SC2238
★★	Q107,Q110,Q201,Q202	2SC2458
★★	Q517,Q518	2SC2603
★★	Q103,Q104	2SC2668
★★	Q507,Q508	2SC2705
★★	Q102	2SC2786
★★	Q605	2SC2878
★★	Q101,Q105	2SK241
★★	Q108	2SK246
★	D604,D607	HZS6B2L
★	D101,D102	ITT310
★	D609,D610	RD12EB
★	D608	RD27EB
★	D616	RD5.1EB
★	D103,D104	SVC321C2 (SVC321D2)
★	D601,D602	S5566
★	D105−D109,D501−D510,D605, D606,D613,D617−D619	1SS252
★	D603	4D4B44

RELAY

Mark	Symbol & Description	Part No.
★★	RY501 Relay	ASR−112

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	T102 AM Antenna transformer	ATB−095
	T101 FM Matching transformer	ATE−063
	L102 AM OSC Coil	ATB−114
	L106 FM Coil	ATC1002
	L105 FM Coil	ATC1004
	L107 FM Coil	ATC1011
	L103 FM Detector Coil	ATE079
	L501,L503 AF Choke Coil	ATH1004
	L101,L108−L110 Indicator	LAU2R2M
	L104 Indicator	LTA472J
	F102,F103 FM Ceramic filter	ATF−126
	F101 FM Band passfilter	ATF−155
	F104 AM Ceramic filter	ATF−208

CAPACITORS

Mark	Symbol & Description	Part No.
	C611 Ceramic capacitor	ACG1002
	C606,C607 Electolytic capacitor	ACH1031
	C116	CCDSL010C50
	C517,C518	CCCSL050C500
	C519−C522	CCCSL101K500
	C128,C303,C304,C509,C510	CCCSL221J50
	C507,C508	CCCSL470J50
	C101	CCDCH040C50
	C119,C515,C516	CCDCH070D50
	C113	CCDCH080D50
	C111,C117,C142,C143	CCDCH150J50
	C112	CCDCH330J50
	C103	CCDRH150J50
	C105	CCDSL020C50
	C107,C505,C506	CCDSL101J50
	C163	CCDSL470J50
	C114	CCDTH180J50
	C150	CEANP100M50
	C616	CEANP3R3M50
	C156	CEASR22M50
	C146	CEASR47M50
	C131	CEASOR1M50
	C130	CEAS010M50
	C160	CEAS1R5M50
	C135,C139,C149,C165,C169, C609,C612	CEAS100M50
	C604	CEAS101M16
	C511,C512	CEAS101M16
	C602	CEAS101M25
	C608	CEAS102M35
	C605	CEAS2R2M100
	C134,C161,C162,C201,C202, C301,C302,C313,C314,C501, C502,C523,C524,C801	CEAS2R2M50
	C136,C158	CEAS3R3M50
	C144	CEAS330M16
	C137,C804	CEAS4R7M50
	C305,C306,C610	CEAS470M10
	C151	CEAS470M25
	C603	CEAS471M6
	C133	CKCYB472K50
	C121,C140	CKCYF223Z50
	C115,C503,C504	CKDYB102K50
	C154,C155	CKDYB272K50
	C315,C803	CKDYB331K50
	C102,C104,C108,C118,C122, C123,C129,C141,C145,C147, C148,C166,C168,C170,C204, C205,C307,C308,C805,C806	CKDYF103Z50
	C180	CKDYF223Z50
	C124,C125,C138,C157,C164, C203,C316	CKDYF473Z50
	C126,C172	CKDYX473M25
	C152,C153	CQMA152K50
	C309,C310	CQMA242J50
	C802	CQMA333K50
	C525,C526	CQMA473K50
	C132	CQMA683J50
	C311,C312	CQMA822J50
	C120	CQSA431J50
	C159	CQSA471J50
	C601	CEHAQ470M35
	TC101,TC102 Ceramic Trimmer	ACM−015

RESISTORS

Mark	Symbol & Description	Part No.
	VR101 Semi−fixed resistor	VRTB6VS472
	R533,R534	ACN−139
	R611 Cardom conposition resistor	ACN−209
	R519,R520,R527,R528,R537, R538,R553−R556	RD1/4PMF□□□J
	R307−R312,R513−R516,R614, R613	RD1/4PM□□□J
	R521−R526,R615	RFA1/4PS101J
	R543,R544	RN1/4PQ1501F
	R607	RS1LMF362J
	R603,R608	RS1PMF□□□J
	R601,R602	RS2LMF□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 4P (ANTENNA)	AKA1009
	Terminal 4P (TAPE1,TAPE2)	AKB1007
	Terminal 6P (VCR,CD ,PHONO)	AKB1024
	X101 Crystal resomator	ASS1005

Control assembly (AWZ1492)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC401,IC402	BA3812L
★★	IC403	M5218PF
★★	IC701	PDG013
★★	Q701,Q704−Q706	RN1203
★	D701,D704 ,D707	1SS252

SWITCHES

Mark	Symbol & Description	Part No.
★★	S701−S727 Tact Switch (TUNING, FM, AM, 1~24, MEMORY, TUNING AUTO / MANU, MEMORY SCAN, SS, TAPE2, TAPE1 / DAT, VCR / LINE, CD, TUNER, PHONO)	ASG−711

CAPACITORS

Mark	Symbol & Description	Part No.
	C437,C438	CCCSL220J50
	C701,C702	CCDCH330J50
	C427	CEASR22M50
	C431,C432	CEASR68M50
	C703	CEAS010M50
	C405,C406,C706	CEAS101M10
	C411,C433,C704	CEAS4R7M50
	C403,C404	CEAS470M16
	C428	CEJAR22M50
	C401,C402,C412,C434	CEJA4R7M35
	C415,C416	CKDYB122K50
	C407,C408,C709,C710	CKDYB331K50
	C413,C414	CKDYB391K50
	C435,C436,C708	CKDYF103Z50
	C707	CKDYF473Z50
	C425,C426	CQMA123K50
	C421,C422	CQMA223K50
	C417,C418	CQMA392K50
	C429,C430	CQMA393K50
	C423,C424	CQMA682K50
	C419,C420	CQMA683K50
	C711	CKDYX473M25

RESISTORS

Mark	Symbol & Description	Part No.
	VR401 Variable resistor	ACS1016
	VR402 Variable resistor	ACT1040
	VR403−VR407 Variable resistor	ACU1020
	Other resistor	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	V701 Fluorescent indicator tube	AAV1043
	X701 Ceramic resonator	ASS1004

SP Switch assembly

SWITCHES

Mark	Symbol & Description	Part No.
★★	S852 Push switch (SURROUND)	ASG1017
★★	S851 Push switch (SPEAKER A, SPEAKER B)	SUJ5LXXS

RESISTORS

Mark	Symbol & Description	Part No.
★★	R851,R852	RS1PMF331J

OTHER

Mark	Symbol & Description	Part No.
	Phone jack (PHONES)	AKN1002

SP terminal assembly

SWITCH

Mark	Symbol & Description	Part No.
	S854 Slide Switch (SURROUND LEVEL)	ASH1003

RESISTORS

Mark	Symbol & Description	Part No.
	R856,R857	RS2LMF100J
	R854,R855	RS3LMF2R7J

OTHER

Mark	Symbol & Description	Part No.
	Terminal (SPEAKER)	AKE−111

Power SW assembly

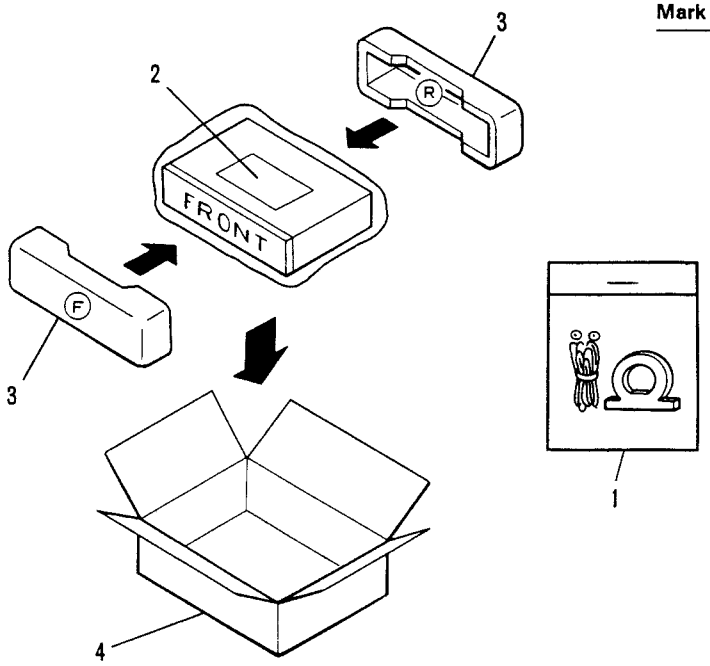
SWITCH

Mark	Symbol & Description	Part No.
	S1 Push switch (POWER)	ASG1007

CAPACITOR

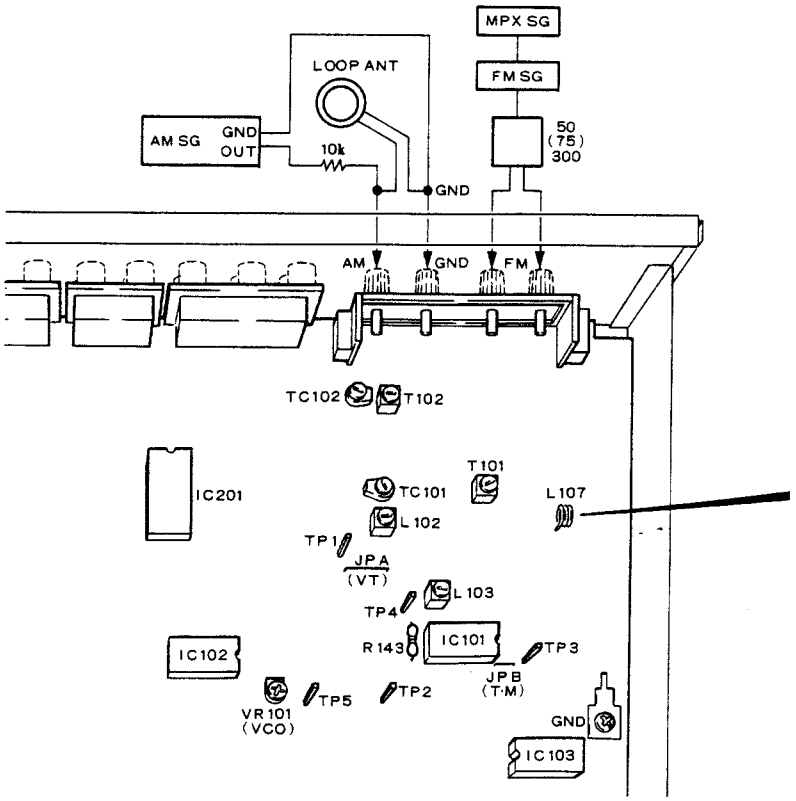
Mark	Symbol & Description	Part No.
	C1 Ceramic capacitor	ACG1002

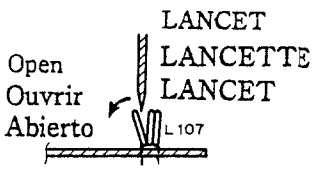
8. PACKING



Mark	No.	Parts No.	Description
	1	AEA1002	Antenna set
	2	ARB1094	Operating instruction
	3	AHA1015	Front rear Pad
	4	AHD1328	Packing case

9. ADJUSTMENTS





Ajusting L107
R'eglage de L107
Ajuste de L107

FM TUNER SECTION

- Connect the FM signal generator (FM SG) to the FM ANTENNA 300Ω terminal through a 300Ω dummy antenna.
- Set the SX−2300 or SX−1300 to the FM band.

(*1) Tune the FM SG to the SX−2300/KUC or SX−1300/KUC.
(*2) Connect the FM multiplex stereo signal generator to the FM SG external modulator terminal. Set the modulation to Main 1 kHz/L+R/±68.25kHz deviation. Pilot 19kHz/±6.75kHz deviation.

Step	FM SG (1kHz, ±75kHz deviation)		SX−2300 SX−1300 Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
1	No signal		87.5MHz	———	Check DC voltage between terminal TP1(VT) and ground (2.5V−4V)
2	98.0MHz	30 to 40 dB	98.0MHz	T101 L107	Adjust DC voltage between IC101 13 pin and ground at maximum.
3	98.0MHz	60dB	98.0MHz	L103	Adjust DC voltage between terminal TP 3 and TP 4 to 0±50mV
4	98.0MHz(*1)	60dB	98.0MHz	VR101	Adjust signal between TP 5(VCO) and ground to 76kHz (within ±100Hz).
	no modulation				

AM TUNER SECTION

MW Tuner Section

- Connect the furnished AM loop antenna between terminals AM ANTENNA and GND.
- Connect the AM signal generator (AM SG) to the AM ANTENNA terminal through a 10kΩ resistor.
- Set the SX−2300 or SX−1300 to the AM(MW) band.

(*3) There are 2 kinds of models in the SX−2300/SD and SX−1300/SD systems.The one is the channel step frequency of 10kHz and the other is 9kHz. Accordingly, in case of model 10kHz step, the adjustment should be performed by using the frequency of Item "10kHz step" and in case of model 9kHz step, the adjustment should be performed by using the frequency of Item "9kHz step".
(*4) Tune the AM SG to the SX−2300 or SX−1300.

Step	AM SG (400Hz,30% modulation)			SX−2300 SX−1300 Frequency display(*3)		Adjustment point	Adjustment procedure
	Frequency(*3)		Level				
	10kHz step	9kHz step		10kHz step	9kHz step		
1	No signal			530kHz	531kHz	L102	Adjust DC voltage between terminal TP 1(VT) and ground. (1.3±0.1V)
2	No signal			1600kHz	1602kHz	TC101	Adjust DC voltage between terminal TP 1(VT) and ground. (10±0.3V)
3	Repeat steps 1 and 2 until both specifications correct.						
4	600kHz(*4)	603kHz(*4)	76dB	600kHz	603kHz	T102	Adjust DC voltage between TP2 and ground at maximum.
5	1400kHz(*4)	1395kHz(*4)	76dB	1400kHz	1395kHz	TC102	
6	Repeat steps 4 and 5 until maximum sensitivity is attained.						
7	1000kHz	999kHz(*4)	45 to 65dB	1000kHz	999kHz	R161 4.7kΩ	However, remove the R161(4.7kΩ) from the COMPLEX assembly if the tuning indicator fails of light up at more than 65dB.

10. IC INFORMATION

PDG013 (MICROCOMPUTER)

Terminal No.	Terminal name	I/O	Condition	Terminal status	Remark
1	—	O	—	—	NOT USED
2	WAKE UP	I	POWER ON	H	When the terminal voltage remains low for more than 60 ns, this terminal enters the backup mode. When the terminal voltage becomes high, this terminal returns to its original mode.
3	REMOTE IN	I	Set to L.	L	(When this terminal is low, it does not receive key input.)
4	CLOCK	O			This terminal outputs "CLOCK" for control signals directed to IC201(TC9164N) and IC103(LM7001P).
5	DATA	O			This terminal outputs "DATA" for control signals directed to IC201(TC9164N) and IC103(LM7001P).
6	TUNER STEREO	I	INPUT PORT	L	When the output of IC102(AN7470P) pin 9 in the tuner unit is low, this terminal causes the FL display stereo indicator to go on.
7	TUNER STOP	I	INPUT PORT	L	When the output of IC101(LA1265S) pin 8 in the tuner unit is low, this terminal causes the FL display tuner indicator to go on.
8 | 15	KEY MATRIX OUTPUT	O			Detects the tact switch position.
16 | 18	—	O	—	—	NOT USED
19	ENABLE	O	While a control signal(DATA) is transmitted to IC103(LM7001)	H	Low while DATA is not transmitted.
20 | 25	KEY MATRIX INPUT	I			Detects the tact switch position.
26	—	O	—	—	NOT USED
27	FUNCTION IC STROBE	O	Immediately after transmitting DATA to IC201(TC9164N)		Instantaneously becomes high after trasmitting a control signal to FUNCTION IC201(TC9164N)
28	TUNER AUTO MONO	O	When the system is in the FM "MONO" mode	H	Set the FM MODE switch to MONO.
29	SIMULATED STEREO	O	When the SIMULATED STEREO is operating	H	When the ON/OFF switch of the SIMULATED STEREO is turned on.
30,31	—	O	—	—	NOT USED
32	Vss	—	GND	OV	
33 | 48	SEGMENT	O			This is a SEGMENT control terminal for the FL display.
49 | 56	GRID	O			This is a GRID control terminal for the FL display.
57	VFDP	I		−29V	This is a power supply terminal for a resistor (incorporated in IC701) to pull down control terminals 33 to 56 for SEGMENT and GRID.

Terminal No.	Terminal name	I/O	Condition	Terminal status	Remark
58	INT2	O	(NOT USED)		Does not function in the program.
59	INT1	O			
60	Xtal	O	When connected to a crystal vibrator(4.19 MHz)		
61	Extal	I			
62	RESET		When the 5V power source is turned on		When data is written in the microcomputer memory, this terminal causes the system to start from the state before the power supply was interrupted. When data in the microcomputer memory is erased, this terminal causes the system to start from the initial state.
63	—	O			NOT USED
64	VDD	—	5V power source	5V	

11. FOR SX-2300/SD, SX-1300/KUC AND /SD MODELS

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

CONTRAST OF MISCELLANEOUS PARTS

The SX−2300/SD and SX−1300/KUC,SD types are the same as the SX−2300/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		SX-2300/ KUC type	SX-2300/ SD type	SX-1300/ KUC type	SX-1300/ SD type	
	Complex assembly	AWZ1419	AWZ1759	AWZ1497	AWZ1759	
	Control assembly	AWZ1492	AWZ1761	AWZ1498	AWZ1761	
	SP switch assembly	Non Supply	Non Supply	Non Supply	Non Supply	
	SP Terminal assembly	Non Supply	Non Supply	Non Supply	Non Supply	
⚠	AC power cord	ADG1031	ADG1015	ADG1031	ADG1015	
⚠★★	FU1 Fuse (4A)	AEK−100	.....	.....	.....	
⚠★★	FU1,FU2 Fuse (2A)	AEK−122	.....	.....	.....	
⚠★★	FU1 Fuse (3.15A)	.....	.....	AEK−1004	.....	
⚠★★	FU1,FU2 Fuse (1.6A)	.....	.....	.....	AEK−121	
⚠	Fuse Holder	.....	AKR-038	.....	AKR-038	
⚠★★	S2 Line Voltage selector	.....	AKX−507	.....	AKX−507	
	Oprating instructions (Spanish)	.....	ARC1071	.....	ARC1071	
★★	S3 Slide switch	.....	ASH−004	.....	ASH−004	
⚠ ★	T1 Power transformer (120V)	ATRS1116	.....	ATS1118	.....	
⚠	T1 Power transformer (110V/120−127V/220V/240V)	.....	ATS1129	.....	ATS1130	
	Knob(SURROUND)	AAD1162	AAD1162	.....	.....	
	Front Panel	ANB1166	ANB1166	ANB1165	ANB1165	
	Coil Spring	ABH1034	ABH1034	.....	.....	
	Packing Case	AHD1328	AHD1328	AHD1329	AHD1329	
⚠★★	Q1,Q2 Transistor	2SC3181N	2SC3181N	2SC3180N	2SC3180N	
⚠★★	Q3,Q4 Transistor	2SA1264N	2SA1264N	2SA1263N	2SA1263N	

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

COMPLEX ASSEMBLY

The COMPLEX ASSEMBLY (For AWZ 1759 and AWZ 1497,AWZ1759)is the same as the COMPLEX ASSEMBLY(AWZ1491)with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		AWZ1491	AWZ1759	AWZ1497	AWZ1760	
	C152,C153	CQMA125K50	CQMA122K50	CQMA125K50	CQMA122K50	
	C601	CEHAQ470M35	CEAS470M35	CEHAQ470M35	CEAS470M35	
	C523,C524	CEAS2R2M50	CEAS2R2M50	.....	.....	
	C606,C607 Electrolytic capacitor	ACH1031	ACH1031	ACH−252	ACH−252	
	C801	CEAS2R2M50	CEAS2R2M50	.....	.....	
	C802	CQMA332K50	CQMA332K50	.....	.....	
	C803	CKDYB331K50	CKDYB331K50	.....	.....	
	C804	CEAS4R7M50	CEAS4R7M50	.....	.....	
	CN12	.....	KPC3	.....	KPC3	
★★	IC801	M5218PF	M5218PF	.....	.....	
★★	IC802	M5201P	M5201P	.....	.....	
★★	Q509,Q510	2SC2238	2SC2238	2SC2235	2SC2235	
★★	Q511,Q512	2SA968	2SA968	2SA965	2SA965	
★★	Q523,Q524	2SC1845	2SC1845	.....	.....	
	D507−D510	1SS252	1SS252	.....	.....	
	R513,R514	RD1/4PM681J	RD1/4PM6813	RD1/4PM821J	RD1/4PM821J	
	R611	ACN−209	.....	ACN−209	ACN−209	
	R549−R552	RD1/8PM□□□J	RD1/8PM□□□J	.....	.....	
	R563,R564	RD1/8PM681J	RD1/8PM681J	RD1/8PM821J	RD1/8PM821J	
	R601	RS2LMF162J	JS2LMF162J	RS2LMF122J	RS2LMF122J	
	R602	RS2LMF182J	RS2LM182J	RS2LMF152J	RS2LM152J	
	R607	RS1LMF362J	RS1LMF362J	RS1LMF302J	RS1LMF302J	
	R608	RS1PMF122J	RS1PMF122J	RS1PMF911J	RS1PMF911J	
	R615	RFA1/4PS101J	RFA1/4PS101J	.....	.....	
	R801,R803−R809,R811−R815	RD1/8PM□□□J	RD1/8PM□□□J	.....	.....	
★★	RY504 RELAY	ASR−112	ASR−112	ASR−111	ASR−111	

CONTROL ASSEMBLY

The CONTROL ASSEMBLY (For AWZ1761 and AWZ1498, AWZ1761) is the same as the CONTROL ASSEMBLY (AWZ1491) with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		AWZ1492	AWZ1761	AWZ1498	AWZ1761	
	R704	RD1/8PM473J	RD1/8PM473J	.....	.....	
	R715	RD1/8PM102J	RD1/8PM473J	.....	.....	
★★	S717	ASG-711	ASG-711	.....	.....	
★	D705,D706	.....	1SS252	.....	.....	

SP SWITCH ASSEMBLY

The SP SWITCH ASSEMBLY (For SX-1300/KUC and SX-1300/SD types)is the same as the SP SWITCH ASSEMBLY (SX-2300/KUC type)with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		SX-2300/ KUC type	SX-1300/ KUC type	SX-1300/ SD type	
★★	S851	SUJ5LXXS	SUJ5LYXS	SUJ5LYXS	
★★	S852	ASG1017	.....	.....	

SP TERMINAL ASSEMBLY

The SP TERMINAL ASSEMBLY (For SX-1300/KUC and SX-1300/SD types) is the same as the SP TERMINAL ASSEMBLY (SX-2300/KUC type) with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		SX-2300/ KUC type	SX-1300/ KUC type	SX-1300/ SD type	
	R854-R856	RS2LMF4R7J	.....	.....	
	R857	RS2LMF100J	.....	.....	
★★	S854	ASH1003	.....	.....	